

What is claimed is:

1. A touch panel including a pair of panels each having a transparent conductive film adhered on a transparent board which are arranged via electrically
5 insulating spacers so that the conductive films of the panels are opposed each other, characterized in that the conductive film being divided into a plurality of regions of desired forms by channels formed by laser etching.

2. The touch panel of claim 1, wherein a plurality
10 of electrode circuits connected to different external conductive wires are provided on the conductive film, and boundary lines are formed with narrow channels so that said plurality of electrode circuits are not short-circuited.

3. The touch panel of claim 2, wherein the conductive film is divided at least into the same number of regions as the electrode circuits.

4. The touch panel of claim 2, wherein closed channels are formed near the periphery so that regions
20 having the electrode circuits are not exposed at the side edge.

5. The touch panel of claim 1, wherein the diameter of the laser spot for the etching is 0.1 mm to 2.0 mm.

6. The touch panel of claim 1, wherein the laser light for the etching is infrared ray with wavelength of
25 900 nm or more.

7. The touch panel of claim 1, wherein the pulse width of the laser light for the etching is 1 ns or less.

8. The touch panel of claim 1, wherein a pair of panels are joined at their perimeters via a double-faced tape, and a conductive film damage preventing element made of elastic material to prevent damage, by the edge of the double-faced tape, to the conductive film of the
30 moving-side panel which receive input pressure, is mounted on the movable board or the double-faced tape.

9. The touch panel of claim 8, wherein a

09944660
T07E80"EE634660

insulation layer extending to the inside of the edge of the double-faced tape is arranged between the fixing-side panel opposed to the moving-side panel, and the double-faced tape, and the conductive film damage preventing device extends to the inside of the edge of the insulation layer.

10. The touch panel of claim 8, wherein the elastic material is rubber resin.

11. The touch panel of claim 1, wherein an optical device is adhered, via a re-usable adhesive layer, on the surface having no conductive film of one or both of a pair of panels, and a 90-degree exfoliation adhesive power of the re-usable adhesive layer to the board surface is 5 g to 500 g / 25 mm.

12. The touch panel of claim 11, wherein the main component of the re-usable adhesive layer is any of an ethylene-vinyl alcohol adhesive, a polyacrylester adhesive, a polymethacrylester adhesive or a silicon adhesive.

13. The touch panel of claim 11, wherein the optical material is any of polarization board, a circular-polarization board or a phase difference board.

14. A touch panel including a pair of panels, each having a transparent conductive film adhered on a transparent board, which are arranged via electrically insulating spacers so that the conductive films are opposed to each other, characterized in that a pair of panels are joined at their perimeters via a double-faced tape, and a conductive film damage preventing element made of elastic material to prevent damage, by the edge of the double-faced tape, to the conductive film of the moving-side panel which receive input pressure, is mounted on the board of the moving-side panel or the double-faced tape.

15. The touch panel of claim 14, wherein an insulation layer extending to the inside of the edge of the double-faced tape is arranged between the fixed-side

0944273101 EE24660

panel opposed to the moving-side panel and the double-faced tape, and the conductive film damage preventing element extends to the inside of the edge of the insulation layer.

5 16. The touch panel of claim 14, wherein the elastic material is rubber resin.

10 17. A touch panel including a pair of panels, each having a transparent conductive film adhered on a transparent board, which are arranged via electrically insulating spacers so that the conductive films are opposed to each other, characterized in that an optical material is adhered, via a re-usable adhesive layer, on the surface, having no conductive film, of one or both of a pair of panels, and the 90-degree peel off power of the re-usable adhesive layer to the board surface is 5 g to 15 500 g / 25 mm.

20 18. The touch panel of claim 17, wherein the main component of the re-usable adhesive layer is any of an ethylene-vinyl alcohol adhesive, a polyacrylester adhesive, a polymethacrylester adhesive or a silicon adhesive.

19. The touch panel of claim 17, wherein the optical material is any of a polarization board, a circular-polarization board or a phase difference board.

add
B1

09042733.083101